A.N.A.R.T.S. News Bulletin 1335 for 13th February 2005.

Cols Column

Early Electrical Communications

Cooke and Wheatstone. Part Three.

The keyboard of the five needle telegraph had five keys, much like the original Baudot or Teleprinter keyboard. Normally each key was in a neutral 'Central' position like the keyboard of a Piano. But unlike the piano, each key could be turned a few degrees either clockwise or anticlockwise, thus sending an electric current in one direction or the other through windings at the receive end of the system. Later on some improved models the keys moved up and down. Each of the receive needles were surrounded by a wire winding.

The needles with their windings were located at the back of a diamond shaped board, spindles attached to the needles protruded through the board and attached to them was another magnetic needle forming an 'Astatic pair'..

The telegraph had six wires going to line and also had one return wire. Each character was achieved by the movement of two of the five needles. Depending on which direction the needles were pointing decided the actual character being transmitted. This meant that the operator had to press or turn two of the keys on the keyboard at the same time.

One of the six wires operated the alarm system that was actually operated by a local battery, the alarm being activated by sending a signal on the sixth wire.

At this time the two men were engaged in attempting to send signals to the telegraph by a wire located under water. They enlisted the help of the Enderby brothers who owned a rope factory at Greenwich. Cooke wrote on 23 may 1837 that 'I am going down to Greenwich tomorrow morning to see their works, and arrange a method of covering our wires with yarn and include them in a rope for our cross Thames experiment. This rope 1,500 feet in length, including 6000 feet of wire, is to be ready by the close of the week'. This shows that a 4 wire system was now being tried.

Though there is no record of this experiment being successful, it is interesting that at the same time by Imperial Decree, a line was to be laid along the bottom of the Gulf of Finland to connect Kronstadt with St. Petersburg. Schilling was to be in charge, but in August Schilling died and with him all work on the telegraph ceased in Russia.

More next week
73's DE Col VK2CTD

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IPS Weekly Solar and Geophysical Report for 4/10th Feb

SUMMARY

Date	04	05	06	07	08	09	10	
10cm flux	82	95	97	103	108	109	114	
AFr index	2	1	6	19	27	14	(10	estimated)
Aaus index	5	4	8	21	24	16	(16	estimated)
T index	14	37	53	38	7	28	41	

Solar flare activity was very low 4/9th and low on 10th.

Geomagnetic activity observed for the Australian Region was quiet
on 4/5th quiet to unsettled on 6th quiet to minor storm on 7th quiet
to active on 8th and unsettled to active on 9/10th.

Southern Australian Ionospheric F2 critical frequencies were depressed
15 to 25 pe cent on 4th near predicted on 5th and 9th mostly near
predicted to 20 percent depressed on 6th mostly near predicted to 30
percent depressed on 7th depressed 15 to 20 percent depressed on 8th
and near predicted to 20 percent enhanced on 10th.

Forecast for 11/17th Feb

Solar activity should be very low to low.

Geomagnetic activity is expected to be mostly quie, with unsettled and
active intervals possible on 11th and 14th.

Frequencies could have minor depressions possible on 11th and 14th
otherwise near normal. Short Wave Fadeouts are unlikely.

courtesy of the IPS Radio and Space Services

summary by Pat VK2JPA ANARTS Broadcast Officer

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VK2SG RTTY DX NOTES FOR WEEKENDING 10TH FEB

Our thanks this week go to W2JGR AA5AU N8PUG DJ3IW GU0SUP WX5L
UT5RP OH2AQ DXSummit.

Bandpass:

Friday 4
0924-21070 VQ9LA Psk31
1031-14090 9A0MDC fer PFX MDXC Trophy
1046-14087 GD0TEP
1218-14082 HF4IARU Qsl SP4GFG
1313-14084 TF3FK
1315-14095 RD3BD

1356-18110 EP4HR Psk31
1357-14085 HF75PZK
1604-14082 GD0TEP
1745-14083 TF4M
1814- 7039 AP2IA
1837- 7039 EP4HR Psk31
1842- 7041 II8MDC MDXC Trophy
1945-10132 6O0CW
1957-14085 EA8BMG
2151-10145 II8MDC

Saturday 5
0157-14081 3D2RR
0547-14084 5Z4DZ
0627-14082 RX0AT

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0703-14081 3D2RR
0849-14082 EA9IB
0932-14091 VR2BG
0938-21087 3B9FR
1003-14086 XX9BB
1036-18102 RW9OG
1044-24921 SU9FL  Qsl WD9DZV
1046-14084 UN8PIM
1154-14087 RV1AC
1206-21083 CX7BF
1226-14084 LY2YR
1238-14088 US0MM
1243-14087 IU1MDC
1319-18101 9G5OO
1325-14085 XX9BB
1325-14087 UR3LC
1330-14086 GD0TEP
1356-18104 UR5RCL
1413-14089 RW6CR
1422-14083 6O0CW  Qsl I2YSB
1423-18105 3B9CR
1432-14084 TF3RB
1443-10130 6O0CW
1504-14086 RW6CR
1509-21084 VQ9LA
1545-14084 5Z4DZ
1611-14090 3B9FR
1615-14081 9A0MDC
1620-14080 8P6SH
1643- 3582 8P6SH
1657-14085 GD0TEP
1717- 7039 XU7ABN
1731-14082 9G5OO
1802-14086 XE1YYD
1837-14088 CN8KD
1854-21086 KP4JRS
1905-21089 L20H
1908-21082 NP4BM
1925-21086 XE1YYD
1927-14087 HR1RMG
1937-21089 XE2XX
1940- 7046 TA1FA
1941-14085 XE1XOE
1941-21092 XE1LM
1945-21086 XE1YJL
2034- 7042 CN8KD
2050- 3598 TA1FA
2123- 3593 EU1MM
2150- 7040 KP4JRS
2153- 7043 CN8KD
2208- 7044 XE2AC

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Sunday 6
0032-21083 BR2BG
0051- 7031 XE2AC
0121- 7047 NP4BM
0237-14090 VR2XLN
0301- 3580 XE2AUB
0317- 7034 KP2D
0357- 3576 XE2AC
0431-21078 UN8PO
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0439- 3595 XE1YYD
0448- 7042 DH8WR/HC2
0446- 3560 6F1IHF  IOTA NA-183
0451-21092 HL5BLI
0622- 3596 DH8WR/HC2
0625-14081 3D2RR
0638-21083 BX4AN
0653-14080 A45WD
0700-14077 CX7BF
0712- 7040 XE1GRR
0751-14085 XU7ABN
0814-14089 TA1FA
0820-21093 A45WD
0838-21087 UP6P
0849-21093 EX2M
0850-14094 EW8OF
0912-14086 CN8KD
0907-14084 EW7EW
0859-21095 6O0CW
0941-14083 TK1CX
1024-14084 CN8KD
1033-21078 UN8PO
1037-21092 CX7BF
1041-21107 EX2M
1040-21099 YB0DPO
1159- 7031 DX0K
1200-21086 TA7EB
1200-21095 UN8GV
1235-21089 NP4BM
1310-21083 KP4JRS
1354- 7038 XE2AC
1355-14078 GD0TEP
1357-21082 TF3RB
1404-14090 HR1RMG
1415- 7043 VR2XLN
1417- 7032 UN6G
1429-14075 XE1L
1458-21094 CN8KD
1458-21096 XE2AC
1505- 7037 EW7EW
1528-14094 YB5BO
1536-14080 YL3FW
1538-14083 TA7EB
1602- 7041 A45WD
1720-14094 TK5IH
1724- 7046 SY3Y
1930-14081 3D2RR
1937-14092 3B9FR
2028-14088 EA8KK
2040-14082 EA9IB
2156-14088 DH8WR/HC2
2247- 7041 9A0MDC

Monday 7
0112-14082 HK6DOS
0533-14081 3D2RR
0929-14081 3D2RR    qsx up
1045-14079 RW0BB/9
1045-21082 6O0CW
1054-28088 RN9FAV
1220-14088 RX3DU
1355-14086 UA2FX
1407-21081 6O0CW
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1438-21086 EA9IB
1440-21090 3B9FR
1514-21079 CX7BF
1532-21087 DH8WR/HC2
1542-14069 UN7GCE
1548-21085 XE1L
1713-14080 CU3CC
1723-14084 CT3AS
1743-14083 XU7ABN
1936-14086 OX3DB
2018-14087 FM5AA
2122-14092 DH8WR/HC2

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Tuesday 8
0354- 3606 6F1IHF IOTA NA-183
0558-21086 6O0CW
0725-18105 EY8CQ
1210-14085 UK8OAR
1330-21092 DH8WR/HC2
1248-14085 EU4AC
1443-21084 XE1L
1717- 7039 HF75PZK
1758-14088 EA8/DJ1OJ
1802- 7039 HZ1IK
1825-14086 DH8WR/HC2
1908-14082 GD0TEP
2147- 7038 EA9IB
2224-14087 HI8/JA6WFM
2230-14085 FM5WD
2254- 7082 HI8/JA6WFM
2258-21083 DH8WR/HC2
cq cq de vk2tty vk2tty

Wednesday 9
0827-18104 VR2BG
0901-10105 UU7JN
1144-21083 6O0CW
1305-28087 3B9FR
1320-21087 DH8WR/HC2
1323-24922 3B9FR
1338-14085 XU7ABN
1416-14092 DX0K
1448-21083 XE1L
1507-21087 3B9FR
1526-10139 VR2BG
1554-14087 3B9FR
1703-14082 DH8WR/HC2
1716-14084 TK5IH
1720-14086 KP4FKN
1754-14082 OO4DSQ
1756-14085 GD0TEP
2017-14084 CN8KD
2047-21085 XQ1VLY
2155-14084 KP4FKN
2203-14085 8P9NX

Thursday 10
0100-14087 XE1L
0116-14087 JT1CO
1050-14085 P29FTR
1057-14085 YB0IR

1156-14086 CN8KD
1202-14087 UN8PIM
1232-14083 GD0TEP
1233-14089 FG5BG
1338-21086 DH8WR/HC2
1407-14087 SU9FL
1427-14085 XU7ABN
1450-21081 EA9IB
1747-14087 VQ9LA
1816- 7037 IH9YMC

Note of interest:

PETER ONE 3Y0X. Team expect to be on Peter I about Feb 17-18
depending on the weather and ice conditions. Despite the new
schedule, the team still hopes to spend two full weeks on the island.
The crewS goal is 100,000 contacts. For details check
http://www.peterone.com/

TRINIDAD TOBAGO, 9Y. YL2YL and YL2LY will be active CW SSB and RTTY
from 10/24 of Feb on all bands. They will use a special call Probably
during CQ WW RTTY WPS and ARRL Contests.

MARSHALL IS., V7 A Japanese team will be on from OC-029 from Mar 18
to 24th Maujro Atoll. They will use also RTTY.

You can also subscribe to the digital-dx reflector - send an
e-mail message to majordomo at mla.nifty.ne.jp as follows:
Subject: (blank) Message Body: subscribe digital-dx

For next week's bulletin, send your bandpass and notes of
interest to Goetz dj3iw at online.de

Gl de (DX2) Luciano I5FLN

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The OPDX Bulletin is unavailable this week due to family commitments of that
editor, so we offer the ARRL DX Bulleting in its place.

DX Bulletin 6 ARLD006
From ARRL Headquarters
Newington CT Feb 10

This week's bulletin was made possible with information provided by
SV1CIB W5UE QRZ DX the OPDX Bulletin The Daily DX 425DXnews
DXNL WA7BNM and Contest Corral from QST. Thanks to all.

ANTARCTICA. Vidar LA2SNA is QRV as 3Y2SNA until Feb 15 from
the Norwegian Troll Station located on Queen Maud Land IOTA AN-016.
 He is active on 20 and 17 meters using SSB as time permits.QSL via bureau.

EAST MALAYSIA, 9M6. Rich PA0RRS will be QRV as 9M6/PA0RRS/8 from
Sarawak IOTA OC-088 from Feb 13/26. QSL to home call.

TRINIDAD AND TOBAGO, 9Y. Girts YL2KL Arvia YL2LY and Juris YL2GM are
QRV as 9Y4/homecalls until Feb 24 from Tobago IOTA SA-009. Activity is
on all bands using CW SSB and RTTY. This includes entries in the CQ RTTY

WPX contest and the upcoming ARRL DX CW contest. QSL to home calls.

CHINA, BY. David BA4DW has been QRV on 160 meters around 1930z.
QSL to home call.

BAHAMAS, C6. Bi, K1CN and Laura are QRV as C6AMM and C6AWW
respectively from Harbour Island IOTA NA-001 until Feb 26. Activity is on
40 to 6 meters using CW and SSB. QSL both calls via K1CN.

ANTARCTICA. Yuri is QRV as CA8WCI/9 from the Chilean Antarctic Base
'Presidente Eduardo Frei Montalva' on King George Island, South
Shetlands, IOTA AN-010. He is active during his spare time and weather
permitting. Activity is on 80 40 and 10 meters. QSL to home call.

SPRATLY ISLANDS. Gi, 4F2KWT is QRV as DX0K from Pag-Asa Island
IOTA AS-051. Activity is on all HF bands using mostly CW SSB and some
RTTY. Lately he has been QRV using RTTY on 40 meters around 1240 to
1300z and 20 meters around 1400 to 1500z. QSL to home call.

CANARY ISLANDS, EA8. Members of the Canary Islands DX Society will
be QRV as EF8BDX from Burrero Rock IOTA AF-004 from Feb 12 to 13.
Activity will be on 15 meters SSB only. QSL via EC8ADU.

PERU, OA. A group of operators are QRV as OC4P from Pachacamas
Island IOTA SA-052 until Feb 13. Activity is on 80 to 6 meters using CW
and SSB QSL via DL5WM.

ARUBA, P4. Miika OH2BAD is QRV as P40MH until Feb 18. Activity is on
all HF bands using CW and SSB. QSL to home call.

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GREECE, SV. Look for SV1CIB SV3FUO and SV3BSF to be QRV as J43BSF
in the CQ RTTY WPX contest as a Multi/Single entry. QSL via SV1CIB.

SAN MARINO, T7. John T77CD will be QRV in the CQ RTTY WPX contest.
QSL via operator's instructions.

CHAD, TT. Luc ON4IA is QRV as TT8KLJ from N'djamena until Mar 20.
QSL to home call.

MACQUARIE ISLAND, VK0. Dave VK0MT has been QRV on 80 meters
around 1300 to 1500z and 15 meters from around 1100 to 1200z.
QSL via E1LET.

MEXICO, XE. Trey N5KO Glenn W6OTC Alberto XE1NK and Ramon XE1KK
will be QRV as 6G1KK during the CQ RTTY WPX contest. Activity will be
on five bands. QSL via W5UE.

OPERATION APPROVED FOR DXCC. The following operation is approved
for DXCC credit: Chesterfield Island TX9 Oct 2004 operation.

THIS WEEKEND ON THE RADIO. The CQ WW RTTY WPX Contest, SARL Kid's
Day, Asia-Pacific Spring CW Sprint, 50th Anniversary Dutch PACC Contest,
YLRL YL-OM SSB Contest, Louisiana QSO Party, OMISS QSO Party, FISTS
Winter CW Sprint, Classic Exchange, British Columbia QSO Challenge, RSGB
1st 1.8 MHz CW Contest and the North American CW Sprint will certainly
keep contesters busy this weekend. Please see Feb QST page 102 and
the ARRL and WA7BNM contest websites for details.

IDENT DE VK2CTD VK2CTD

The Society can be contacted in the following ways:
To Pat VK2JPA via vk2jpa at wia.org.au or
Col VK2CTD via ctdavies at bigpond.net.au or
you can drop a line to P.O. Box 93 Toongabbie, NSW 2146.
73's for this week from Pat VK2JPA Broadcast Officer
NNNN